



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/552,149

07/17/2006

Andreas Frey

1454.1640

9167

21171 7590 12/17/2008

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

CHAKOUR, ISSAM

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,149	Applicant(s) FREY ET AL.	
	Examiner ISSAM CHAKOUR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/26/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendments and arguments filed on 09/26/2008. The applicant canceled claims 1-11 as of 07/17/2006, and presented claims 12-30, claims 28-30 being newly presented claims as of 09/26/2008.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 12, 13, 24-27, and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kroth et al.

3. Regarding Claim 12, Kroth teaches a method for transmitting data in a radio communications system, comprising:
providing a common channel (See Paragraph [0024] at the bottom of the page 2)
allocated concurrently to a plurality of subscribers for data transmission between a base station and subscriber stations of the subscribers (see figure 1);
making measurements of transmission quality of the common channel available in the base station (See paragraph [0027], lines 6-7); and transmitting from the base station a first message to a controlling radio network controller (see [0029], lines 2-4) allocated to the base station (See paragraph [0025]) when the measurements show that the

Art Unit: 2617

transmission quality does not meet a defined criterion (e.g. threshold values, see [0015] lines 4-5 and claim 14), the first message containing information about the transmission quality (See paragraph [0027], lines 6-7) and about at least one particular subscriber station for which the measurements indicated bad quality of transmission (See claim 16 and 17).

4. Regarding Claim 13, Kroth teaches the method in accordance with claim 12, wherein said making of the measurements is performed in the base station (Paragraph [0036]), lines 1-3).

5. With respect to claims 24 and 26, Kroth discloses the method according to claim 13 and 12 respectively, wherein each of the subscriber stations has a serving radio network controller corresponding thereto which is responsible for configuration or control of the respective subscriber stations (See figure 1 and paragraph [0034]), and wherein said method further comprises transmitting a second message from the controlling radio network controller to the serving radio network controller allocated to each of the at least one particular subscriber station (See paragraph [0034], lines 11-12).

6. Regarding claims 25 and 27, Kroth teaches the method in accordance with claim 24 and 26 respectively, further comprising deriving, by the controlling radio network controller, a suggested solution for a change of the configuration of the subscriber stations from the first message, and wherein the second message includes the suggested or recommended solution (See paragraph [0034] and [0035]).

Art Unit: 2617

21. Consider claim 29, Kroth discloses a radio communications system, comprising: serving radio network controllers (e.g. SRNC, see figure 1); a controlling radio network controller in communication with the serving radio network controllers (e.g. CRNC, see figure 1); base stations in communication with the controlling radio controller; a plurality of subscriber stations using a shared channel (e.g. common channel) for exchanging data with a base station among the base stations (See figure 1), each subscriber station being configurable based on a message received from one of serving radio network controllers (See paragraph [0034]), wherein a base station sends a first message to the controlling radio network controller (See paragraph [0029], lines 2-4) when a measured transmission quality (See [0027], lines 6-7) of at least one of the plurality of subscriber stations exchanging data with the base station does not meet a defined criterion (See paragraph [0015], lines 4-5), the first message containing information about the transmission quality and about the at least one subscriber station (See claim 16 and 17).

22. Consider claim 30, Kroth discloses the radio communication system in accordance with claim 29, wherein the controlling radio network controller sends a second message to the one of the serving radio controllers that is able to configure the at least one subscriber stations (See paragraph [0034], lines 8-13).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroth in view of Ghosh (WO 02/01897).

8. Regarding claim 14, Kroth teaches the method in accordance with claim 12, Kroth does not teach the method wherein said making of the measurements is performed in the subscriber stations or mobile phone, and wherein said method further comprises transmitting the measurements to the base station. Ghosh on the other hand teaches that the measurements are performed by the subscriber's station (Page 5, lines 22-23) wherein said method further comprises transmitting the measurements to the base station (Page 5, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time of the invention

Art Unit: 2617

to see that the cell load reporting involves measurements done both by the base station and the subscriber's station depending on the feedback requested. For example the base-station is provided feedback by the provision of the measurements done by the subscriber's station such as pilot strength signal, signal to interference plus noise ratio, and data queue. These latter measurements are done at the subscriber's end for the purpose of tracking quality of service. The base station further performs measurements that are relevant to the RNC and sends the total measurements as a form of feedback report to the RNC on the transmission conditions.

9. Regarding claim 15, Kroth teaches the method in accordance with claim 12, wherein each of the subscriber stations has a serving radio network controller corresponding thereto which is responsible for configuration of the respective subscriber stations (See figure 1 and paragraph [0034]), and wherein said method further comprises transmitting a second message from the controlling radio network controller to the serving radio network controller allocated to each of the at least one particular subscriber station (See paragraph [0034], lines 11-12).

Kroth does not teach the method wherein said making of the measurements is performed in the subscriber stations or mobile phone, and wherein said method further comprises transmitting the measurements to the base station. Ghosh on the other hand teaches that the measurements are performed by the subscriber's station (Page 5, lines 22-23) wherein said method further comprises transmitting the measurements to the base station (Page 5, lines 19-23).

Art Unit: 2617

It would have been obvious to one of ordinary skill in the art at the time of the invention to see that the cell load reporting entails measurements done both by the base station and the subscriber's station depending on the feedback requested. For example the base-station is provided feedback by the provision of the measurements done by the subscriber's station such as pilot strength signal, signal to interference plus noise ratio, and data queue. These latter measurements are done at the subscriber's end for the purpose of tracking quality of service. The base station further performs measurements that relevant to the RNC and sends the total measurements as a form of feedback to the RNC.

10. Regarding claim 16, Kroth in view of Ghosh teaches the method according to claim 15. Kroth in view of Ghosh does not teach the method wherein a specified transmission rate is agreed for each subscriber (note, each subscriber opts for a particular data rate as agreement between the subscriber and the service provider discloses), and wherein said method further comprises checking compliance (e.g. testing or comparing the transmission with data rate according to the subscriber's profile) with the agreed transmission rate during said making of the measurements of the transmission quality. However, because monitoring quality of service involves measuring the real time data transmission rate versus the subscriber's agreement of the data rate or the plan's data rate (measuring and comparing to the threshold of quality transmission as disclosed by Ghosh, claims 4-8 and Kroth, paragraph [0030], lines 3-4), the method as disclosed in Kroth and Ghosh inherently consists of this feature.

Art Unit: 2617

11. Regarding claim 17, Kroth in view of Ghosh teaches the method according to claim 16, Kroth further discloses that the method further comprises: allocating timers to data units to be transmitted; ceasing transmission of the data units after a corresponding timer has elapsed; and checking, during the making of the measurements of the transmission quality, to determine whether a number of elapsed timers relative to a total number of allocated timers (page 3, paragraph [0024], lines 10-15) exceeds a specified threshold value (paragraph [0030], lines 3 and 4).

12. Regarding claim 18, Kroth in view Ghosh teaches the method according to claim 17, Kroth further teaches in accordance with claim 17, wherein the first message contains at least one of a name (e.g. ID, assigning an identification code or number to a user equipment or radio device based on the SRNC is an inherent feature of roaming devices in wireless communication systems) of each of the at least one particular subscriber station and how many of the subscriber stations for which the transmission quality was bad (See paragraph [0030], line 11-12, Note that the average number of acknowledgement signals, implies the number of subscriber stations for which the transmission quality is bad, because when data are being transmitted on the downlink channel to the subscriber station or UE, an acknowledgement signal is to be sent by the subscriber station to the base station or node B, when there is no acknowledgement by the subscriber station, it suggests after a predetermined or threshold period of time that there is a delay in transmission of packet data and thus bad quality of transmission.

Art Unit: 2617

13. Regarding claim 19, Kroth in view of Ghosh teaches the method in accordance with claim 18, Kroth does not teach explicitly the method wherein the second message contains the name of each of the at least one particular subscriber station, however the latter said function is inherent because transmitting the load report to CRNC would require retaining the ID about the particular subscriber station or more whose transmission quality is affected.

14. Regarding claim 20, Kroth in view of Ghosh teaches the method in accordance with claim 19, Kroth does not explicitly teach that the method further comprising allocating a temporary identification being to the subscriber stations by the controlling radio network controller, and wherein the temporary identification is used to name the subscriber stations, nonetheless, allocating a temporary identification to the subscriber station is inherent in the routing function of CRNC, the temporary ID contains the ID of the subscriber station in addition to the SRNC identifier.

15. Regarding claim 21, Kroth in view of Ghosh teaches the method in accordance with claim 20, Kroth further teaches the method further comprising deriving, by the controlling radio network controller, a suggested solution (see paragraph [0034], line 11) for a change of the configuration of the subscriber stations from the first message, and wherein the second message includes the suggested solution (see paragraph [0034], lines 8-13).

Art Unit: 2617

16. In claim 22, Kroth in view of Ghosh teaches the method in accordance with claim 21, Kroth further teaches the method wherein the suggested solution contains information on at least one of a possible transmission procedure to a different base station (See paragraph [0041]). Kroth however does not teach the allocation of a dedicated channel for a corresponding one of the at least one particular subscriber station. However, Ghosh teaches the allocation of a dedicated channel for a corresponding one of the at least one particular subscriber station (see claim 9-10). The claim would have been obvious because a person of ordinary skill in the art would have been motivated to combine both inventions as disclosed in Kroth and Ghosh to achieve the claimed invention and that there would have been a reasonable expectation of success which is optimizing the transmission of data.

17. Regarding claim 23, Kroth in view of Ghosh teach the limitation in accordance with claim 15, Kroth further teaches the method comprising deriving, by the controlling radio network controller, a suggested solution (see paragraph [0034], line 11) for a change of the configuration of the subscriber stations from the first message, (see paragraph [0031]), and wherein the second message includes the suggested solution (see paragraph [0034], lines 8-13).

18. Claim 28 rejected under 35 U.S.C. 103 (a) as being unpatentable over Kroth in view of Kim et al (US 2003/0119452).

Art Unit: 2617

19. Consider claim 28, Kroth discloses a method for transmitting data in a radio communications system in which a plurality of subscriber stations use a common channel for exchanging data with a base station (See Paragraph [0024] at the bottom of the page 2), comprising:

measuring a transmission quality of the common channel for each of the subscriber stations (See paragraph [0027], lines 6-7); and

transmitting a first message from the base station to a controlling radio network controller controlling the base station (see [0029], lines 2-4) when transmission quality of at least one of the subscriber stations is inadequate as the measured transmission quality for the at least one of the subscriber stations does not satisfy a respective predetermined criterion (e.g. threshold values, see [0015] lines 4-5 and claim 14), the first message containing information about the measured transmission quality of the at least one subscriber station with inadequate transmission quality (See claim 16 and 17).

Note that Kroth teaches common channel which is a shared channel, However the examiner presents a reference by Kim in which he discloses that a plurality of subscribers use shared channel for exchanging data with a base station (See claim 1), and measuring the transmission quality of the shared channel for each of the subscriber stations (See claim 18, lines 3-4 on page 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kroth's invention with the teachings of Kim because it would enable the controller to control the transmission power accordingly based on the communicated threshold measurements.

Response to Arguments

Applicant's arguments filed on 09/26/2008 have been fully considered but they are not persuasive.

Regarding claims 12, 13, 24-27, the examiner respectfully disagrees with the traverse made by the applicant.

In claim 12, the applicant submitted that Kroth in the cited passage makes no reference to “making measurements of transmission quality”. The examiner respectfully disagrees because while Kroth discloses cell load reporting for load conditions and distribution purposes, it is well known in the art that load imbalance on particular nodes create a significant loss of transmission quality whether that be with respect to bandwidth or transmission power, as a result the load report takes in consideration transmission quality. Nevertheless, Kroth teaches that transmission quality assessment (measurements) is an essential step in an efficient planning and resource assignment assumed or provided by the base-stations (See paragraph [0027], lines 6-7 in Kroth). Therefore, it is clearly that measurement of transmission power is at least inherently disclosed by Kroth. Furthermore, the conditions upon which the CRNC and SRNC rely on to determine potential measures to be taken for resource assignment and improvement of transmission quality, are discloses as threshold values or events when satisfied or occur they trigger CRNC to issue recommendations to the SRNC regarding the best configuration available in node/UE communication see [0015] lines 4-5 and claim 14). Thus the criterion or condition for the process as claimed by the applicant is taught by Kroth.

With respect to claims 13, 24-27, the applicant submitted that because Kroth does not teach all the limitations as claimed in claim 12, said claims are allowable in view of their dependency on claim 12. The examiner respectfully disagrees because as stated above claim 12 covers all the limitation making claims 13, 24-27 inherit the deficiency. Therefore, claims 13, 24-27 are rejected as stated above.

Regarding claims 14-23, the examiner respectfully disagrees with the traverse made by the applicant. The applicant submitted that claims 14-23 are patentable in view of their dependency on the independent claim 12. The examiner respectfully disagrees because claim 12 is taught by Kroth making claims 14-23 inherit the deficiency. Claims 14-23 stand rejected as applied above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2617

examiner should be directed to ISSAM CHAKOUR whose telephone number is (571) 270-5889. The examiner can normally be reached on Monday-Thursday (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Perez Rafael can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Issam Chakour/

Examiner, Art Unit 2617

IC

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617